

**Remedial Investigation Report
for
Site 21 – Buildings
1517/1506 Area**

Volume II of II

**Naval Station Great Lakes
Great Lakes, Illinois**



Naval Facilities Engineering Command Midwest
Contract Number N62472-03-0057
Contract Task Order C064

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US EPA RECORDS CENTER REGION 5



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APPENDIX G

HUMAN HEALTH RISK ASSESSMENT SUPPORTING DATA

TABLE G-1 UNCERTAINTY ASSESSMENT
COMPARE TABLE 5-11 AND IEPA PROPOSED TOXICITY VALUES - ORAL/DERMAL
SITE 21 - BUILDINGS 1517/1506 AREA
NAVAL STATION GREAT LAKES
GREAT LAKES, ILLINOIS

Chemical of Potential Concern	Chronic/ Subchronic	Oral RfD		IEPA Proposed Subchronic RfD	Difference in Subchronic RfD - RA and IEPA values
		Value	Units		
CHRONIC					
Semivolatile Organic Compounds					
NAPHTHALENE	Chronic	0.02	mg/kg/day	0.6	RA RfD is more conservative
TCDD TEQ (use 2,3,7,8-TCDD)	Chronic	1.00E-09	mg/kg/day	2.00E-08	RA RfD is more conservative
PENTACHLOROPHENOL	Chronic	5.00E-03	mg/kg/day	0.001	Tier 3 Subchronic value lower than IRIS chronic. Therefore, no change proposed.
Pesticides/PCBs					
AROCLOTR 1260	Chronic	2.00E-05	mg/kg/day	3.00E-05	RA RfD is more conservative
DELTA-HEXACHLOROCYCLOHEXANE	Chronic	8.00E-03	mg/kg/day	0.00001	Tier 3 Subchronic value lower than IRIS chronic. Therefore, no change proposed.
Volatile Organic Compound					
BENZENE	Chronic	4.00E-03	mg/kg/day	0.01	RA RfD is more conservative
TETRACHLOROETHYLENE	Chronic	1.00E-02	mg/kg/day	0.1	RA RfD is more conservative
Inorganics					
ALUMINUM	Chronic	1.0E+00	mg/kg/day	see below	
ANTIMONY	Chronic	4.0E-04	mg/kg/day	same	No difference
ARSENIC	Chronic	3.0E-04	mg/kg/day	see below	
BARIUM	Chronic	2.0E-01	mg/kg/day	no comment	No difference
CADMUM	Chronic	1.0E-03	mg/kg/day	0.0005	Tier 3 Subchronic value lower than IRIS chronic. Therefore, no change proposed.
CHROMIUM VI	Chronic	3.0E-03	mg/kg/day	see below	
COBALT	Chronic	3.0E-04	mg/kg/day	0.003	RA RfD is more conservative
COPPER	Chronic	4.0E-02	mg/kg/day	0.01	Tier 3 Subchronic value lower than IRIS chronic. Therefore, no change proposed.
IRON	Chronic	7.0E-01	mg/kg/day	same	No difference
MANGANESE	Chronic	4.7E-02	mg/kg/day	0.023	RA less conservative
MERCURY	Chronic	3.0E-04	mg/kg/day	see below	
VANADIUM	Chronic	9.0E-03	mg/kg/day	0.005	Based on new RSL. RA less conservative.
SUBCHRONIC					
ALUMINUM	Subchronic	2.0E+00	mg/kg/day	1	RA less conservative
ARSENIC	Subchronic	5.0E-03	mg/kg/day	0.003	RA less conservative
Chromium VI	Subchronic	2.0E-02	mg/kg/day	0.005	Tier 3 Subchronic value lower than IRIS chronic. Therefore, no change proposed.
MERCURY	Subchronic	3.0E-03	mg/kg/day	no comment	No difference

Bold = Difference in HHRA and IEPA subchronic toxicity values.